
Module 7: Management Strategies and Potential ARARs

Module Objectives

- ❑ Define the term “ARARs,” “applicable,” “relevant and appropriate,” “state ARAR,” “to be considered,” and “area of contamination”
- ❑ Compare and contrast compliance with ARARs with protectiveness
- ❑ Identify the single most important CERCLA ARAR
- ❑ Compare and contrast “disposal” with “land disposal”

Module Objectives

- ❑ **Identify what constitutes placement or land disposal**
- ❑ **Explain the relationship between CERCLA and CWA Water Quality Standards, maximum contaminant levels, and maximum contaminant level goals.**

History of ARARs

- ❑ **1985 NCP revisions**
 - **Compliance Policy**
 - **Addressed "How Clean is Clean"**
 - **Remedial actions must attain Federal ARARs**

- ❑ **SARA codified and expanded ARARs provision in 1986**
 - **More stringent state ARARs added**
 - **One waiver deleted, two added**
 - **MCLGs and WQC to be met when relevant and appropriate**

Definition of ARARs

- ❑ Applicable or relevant and appropriate requirements pertain to any federal environmental law and any state environmental or facility siting law
- ❑ SARA requires compliance with ARARs at the completion of the remedial action for material remaining on site
- ❑ Only substantive requirements must be met on site
- ❑ Substantive and administrative requirements must be met off site
- ❑ Must be “promulgated” and “enforceable”

"Applicable"

- ❑ **Directly and fully address the contaminant or situation**
- ❑ **Determined site-specifically**
- ❑ **Based on jurisdictional prerequisites of the law**

"Relevant and Appropriate"

- ❑ **Laws/regulations not binding to site situation but are sufficiently similar**
- ❑ **All or part of requirement may be relevant and appropriate**
- ❑ **Determinations made site-specifically, but often guided by national policy (e.g., MCLs)**

State ARARs

- ❑ **Promulgated standards**
 - Those that are of generally applicability and legally enforceable
- ❑ **More stringent than federal requirement**
- ❑ **Identified by the state in a "timely manner"**
 - Should be a single point of contact within the State

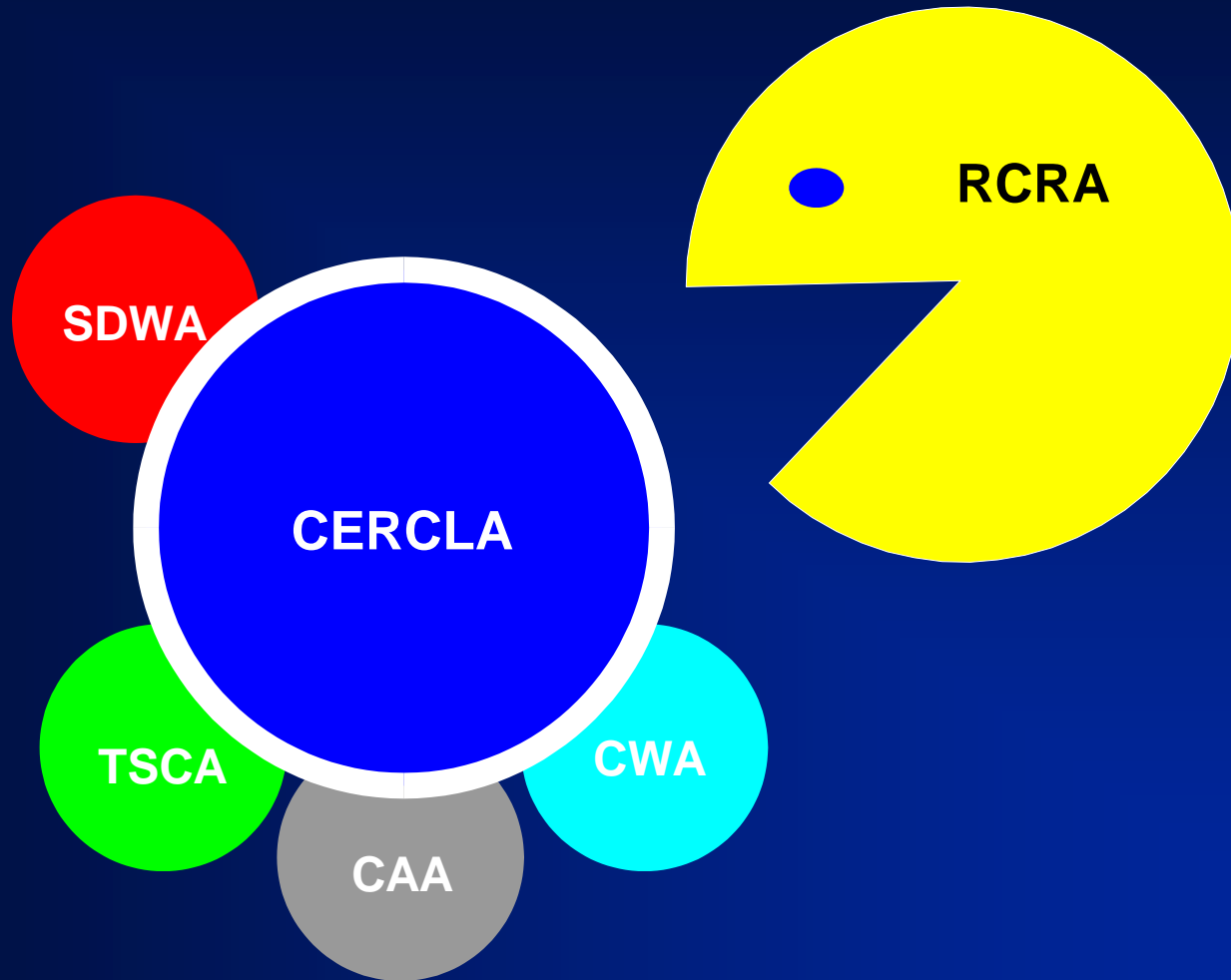
"To Be Considered"

- ❑ Not ARARs
- ❑ Criteria, advisories, guidances
- ❑ Use as needed to ensure protection

ARARs and Protectiveness

- ❑ Although ARARs and protectiveness often related, not synonymous
- ❑ Can waive ARARs, not protectiveness
- ❑ ARARs may need to be supplemented or exceeded to ensure protection. Additionally, a one in a million point of departure is used if ARARs are unavailable or are not sufficiently protective
- ❑ TBCs used as appropriate in development of risk assessment

Major Federal ARARs



Major RCRA Disposal Regulations

- ❑ **Closure**
- ❑ **Minimum technology**
- ❑ **LAND DISPOSAL RESTRICTIONS**
- ❑ **Location requirements***
- ❑ **Corrective action (subpart S)***
- ❑ **Subtitle D***

*** Additional requirements under development**

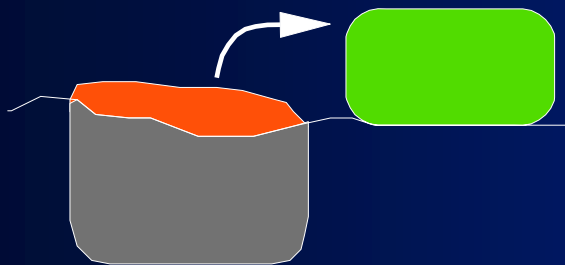
Why is Disposal/Placement Important?

- ❑ Many regulations are triggered by "disposal" or "land disposal"
- ❑ Closure regulations are applicable if RCRA hazardous waste is disposed
- ❑ Land ban requirements are applicable when restricted RCRA waste is placed or "land disposed"

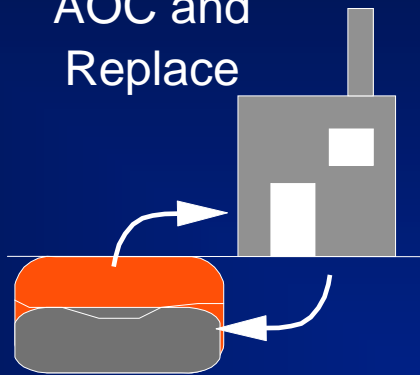
What Constitutes Placement/Land Disposal?

Placement/Disposal

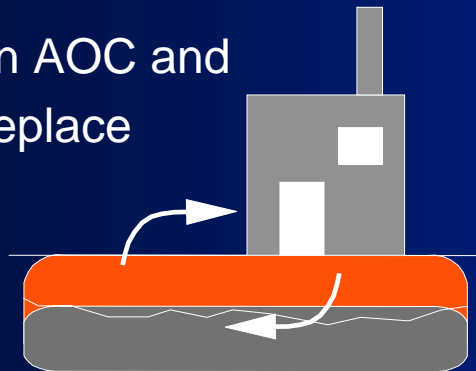
Consolidate Outside
of Area of
Contamination



Treat Outside
AOC and
Replace



Treat in AOC and
Replace

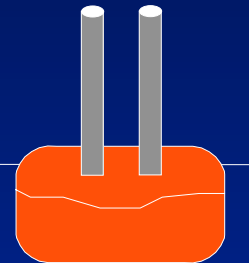


Not Placement/Disposal

Consolidate
in Same
Area



In-Situ
Treatment



Cap



CWA Water Quality Criteria and Standards

- ❑ **Water quality criteria are guidelines for protection of human health or aquatic life**
- ❑ **CERCLA requires attainment when relevant and appropriate under the circumstances of the release**
- ❑ **Determination depends on the designated or potential water use, the media affected, the purpose for which the criteria were developed, and current scientific information**
- ❑ **States designate use and promulgate standards (typically NPDES discharge permit levels)**
- ❑ **Use water quality standards rather than water quality criteria**

SDWA Drinking Water Standards

- ❑ **Maximum contaminant levels (MCLs) and non-zero maximum contaminant level goals (MCLGs) are potential ARARs for current or potential drinking water sources**
- ❑ **Consider zero-MCLGs in outside risk range special circumstances**
- ❑ **Secondary MCLs are not ARARs unless promulgated by states**

Module Summary

- ❑ ARARs= Applicable or relevant and appropriate requirements
- ❑ ARARs pertain to any federal law and any state environmental or facility siting law
- ❑ Compliance with ARARs does not necessarily ensure protectiveness. ARARs may need to be supplemented to ensure protection
- ❑ RCRA is one of the most important and commonly encountered ARARs